

CLAIMS

1. A system for de-icing a cableway, comprising:
a cableway; and
a power source electrically connected to the cableway for heating the cableway.

5 2. A system as in claim 1, wherein the power source provides AC to the cableway.

3. A system as in claim 2, wherein the AC has a frequency in a range of about from 50 to 200 Hz.

10 4. A system as in claim 1, wherein the power source provides DC power to the cableway.

5. A system as in claim 1, wherein the power source provides power to the cableway in a range of about from 5 to 100 watts per meter of the cableway.

15 6. A system as in claim 1, further comprising a transformer connected to the power source and the cableway, whereby the power source provides power having a high voltage, and the transformer is capable of stepping down the high voltage to a low voltage.

7. A system as in claim 1, wherein the cableway comprises a cable span, said cable span being separately connected to a power source.

20 8. A system as in claim 7, further comprising:
a circuit connection; and
a plurality of cable spans, each cable span having a first end and a second end;
wherein the first ends of the cable spans are electrically connected through the circuit connection to a power terminal of a power source.

9. A system as in claim 8, wherein the circuit connection is switchably connectable to ground.

10. A system as in claim 8, wherein the second end of the cable spans are electrically connected to ground.

25 11. A system as in claim 7, further comprising:
a plurality of cable spans, each cable span having a first end and a second end;
a first power bus connected to a first terminal of a power source; and
a second power bus;
wherein the first end of a plurality of spans is electrically connected to the first power bus, and the second end of a plurality of spans is electrically connected to the second power bus.

30 12. A system as in claim 11, wherein the first terminal is a power terminal, and the second

power bus is connected to a second terminal of the power source.

13. A system as in claim 11, wherein the second power bus is connected to electrical ground.

14. A system as in claim 1, further comprising:

a first end station connected to electrical ground; and

5 a second end station connected to electrical ground, wherein the cableway is connected to electrical ground at the first and second end stations.

15. A system as in claim 1, wherein the cableway comprises: a first cable segment containing at least a first cable span; and a second cable segment containing at least a second cable span, the first cable segment connected to a power source, and the second cable segment connected to a power source separately from the first cable segment.

10 16. A system as in claim 15, wherein the first cable segment is switchably connected to a power source separately from the second cable segment.

17. A system as in claim 1, further comprising a first transformer and a second transformer, and wherein the first transformer is electrically connected to a power source and the first cable segment, the second transformer is electrically connected to a power source and the second cable segment.

18. A system as in claim 1, further comprising a plurality of power sources, wherein the cableway comprises: a first cable segment containing at least a first cable span, and a second cable segment containing at least a second cable span, the first cable segment is connected to a first power source in a first circuit, and the second cable segment is connected to a second power source in a second circuit.

19. A system as in claim 1, wherein the system melts ice using power having a voltage in a range of about from 10 to 20 volts.

20. A system for de-icing an elongated conductor, comprising:

25 an elongated conductor; and

a power source electrically connected to the elongated conductor;

wherein the elongated conductor comprises a conductor span, said cable span being separately connected to a power source.

21. A system as in claim 20, wherein the power source provides AC to the elongated conductor.

30 22. A system as in claim 21, wherein AC has a frequency in a range of about from 50 to 200

Hz.

23. A system as in claim 20, wherein the power source provides DC power to the elongated conductor.

24. A system as in claim 20, further comprising a transformer connected to the power source and the elongated conductor, whereby the power source provides power having a high voltage, and the transformer is capable of stepping down the high voltage to a low voltage.

5 25. A system as in claim 24, further comprising:

a circuit connection; and

a plurality of conductor spans, each conductor span having a first end and a second end;

10 wherein the first ends of the conductor spans are electrically connected through the circuit connection to a first terminal of a power source.

15 26. A system as in claim 25, wherein the circuit connection is switchably connectable to ground.

20 27. A system as in claim 20, further comprising:

a plurality of conductor spans, each conductor span having a first end and a second end;

a first power bus connected to a first terminal of the power source; and

a second power bus;

25 wherein the first end of a plurality of conductor spans is electrically connected to the first power bus, and the second end of the plurality of conductor spans is electrically connected to the second power bus.

30 28. A system as in claim 27, wherein the first terminal is a power terminal, and the second power bus is connected to a second terminal of the power source.

29. A system as in claim 27, wherein the second power bus is connected to electrical ground.

30 30. A system as in claim 20, wherein the elongated conductor comprises: a first conductor segment containing at least a first conductor span; and a second conductor segment containing at least a second conductor span, the first conductor segment connected to a power source, and the second conductor segment connected to a power source separately from the first conductor segment.

31. A system as in claim 30, wherein the first conductor segment is switchably connected to a power source separately from the second conductor segment.

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32. A system as in claim 30, further comprising a first transformer and a second transformer, and wherein the first transformer is electrically connected to a power source and the first conductor segment, the second transformer is electrically connected to a power source and the second conductor segment.

5 33. A system as in claim 32, wherein the first transformer is switchably connected to a power source separately from the second transformer.

34. A system as in claim 20, further comprising:
a plurality of power sources,
wherein the elongated conductor comprises a first conductor segment and a second conductor segment, the first conductor segment is connected to a first power source in a first circuit, and the second conductor segment is connected to a second power source in a second circuit.

35. A system as in claim 20, wherein the system melts ice using power having a voltage in a range of about from 10 to 20 volts.

36. A method for de-icing a cableway, comprising a step of:
applying electric power to the cableway for heating the cableway.

37. A method as in claim 36, wherein applying electric power comprises separately applying electric power to a cable span.

38. A method as in claim 37, wherein applying electric power comprises applying electric power to at least one cable span, and not applying power to at least one cable span.

39. A method as in claim 36, wherein applying electric power comprises separately applying electric power to a cable segment.

40. A method as in claim 39, wherein applying electric power comprises applying electric power to at least one cable segment, and not applying power to at least one cable segment.

41. A method as in claim 39, wherein applying electric power comprises applying electric power having a voltage in a range of about from 10 to 20 volts to a cable segment.

42. A method as in claim 36, wherein applying electric power comprises applying about 5 to 100 watts per meter of cableway.

43. A method as in claim 36, wherein applying electric power comprises applying low-frequency AC having a frequency in a range of about from 50 to 200 Hz.

44. A method as in claim 36, wherein the cableway has a plurality of spans, and further comprising steps of:

electrically connecting the first end of a plurality of spans to a first terminal of a power source; and

5 applying electric power to the plurality of connected spans.

45. A method as in claim 44, further comprising:

electrically connecting the second end of a plurality of spans to electrical ground.

46. A method as in claim 36, further comprising:

applying power to a first transformer that is electrically connected to the cableway, such that the first transformer reduces the voltage and increases the current of the power.

10 47. A method as in claim 46, further comprising: .

applying power to the first transformer and a second transformer, the first transformer connected to a first cable segment containing at least a first cable span, the second transformer connected to a second cable segment containing at least a second cable span.

15 48. A method as in claim 36, wherein applying electric power comprises applying power from the first power source to a first cable segment, and applying power from a second power source to a second cable segment.

49. A method as in claim 36, wherein said applying electric power comprises applying power from the first power source to a first cable segment, and simultaneously applying power from a 20 second power source to a second cable segment.

50. A method for de-icing a elongated conductor, comprising a step of:

separately connecting a conductor span with a power source; and

applying electric power to the connected conductor span.

51. A method as in claim 50, wherein applying electric power comprises applying electric power simultaneously and separately to a plurality of conductor segments.

25 52. A method as in claim 50, wherein applying electric power comprises applying electric power to at least one conductor segment, and not applying power to at least one conductor segment.

53. A method as in claim 50, wherein applying electric power comprises applying low-frequency AC having a frequency in a range of about from 50 to 200 Hz.

54. A method as in claim 50, further comprising:

applying power to a first transformer that is electrically connected to the elongated conductor, such that the first transformer reduces the voltage and increases the current of the power.

5 55. A method as in claim 54, further comprising:

applying power to the first transformer and a second transformer, the first transformer connected to a first conductor segment, the second transformer connected to a second conductor segment.

56. A method as in claim 50, further comprising:

10 applying power from a first power source to a first conductor segment, and applying power from a second power source to a second conductor segment.